LCD Colour Digital Television Receiver

User's manual

1. Precautions

1. Storage

※ Keep this product away from extremely hot or cold places. The storage temperature ranges from -20℃ to 60℃ and the working temperature from 0℃ to 40℃.

※ Do not use this product at damp environment like bathtubs, wash basins, kitchens, washtubs, as well as basements, swimming pools or similar places.

※ Do not expose your TV set to high humidity, dust or oil smoke.

※ Do not throw or drop this product.

※ Do not subject this device to the inside of a case or strong vibrations, avoiding strong collision.

※ Do not push on or scrub this product with sharp objects.

2. Maintenance

※ Disconnect all cables of this device at first before cleaning.

※ Wipe the enclosure, screen and keys using soft cloth with a little soft detergent on.

※ Do not use polishing cloth, abstergent, and all types of propellants or chemical detergents like alcohol and benzene to clean your device.

Warning!

※ Do not watch television programs or turn your TV set on for your own and others' safety.

※ It is very dangerous to watch television programs or operate the TV set while driving.

Special Notice

Bright spots or dark spots may appear on the screen. This is a normal phenomenon associated with the active matrix display technology and is not a sign of malfunction. Do not attempt to maintain. For any failures, please turn off your TV set immediately and contact us or your dealer. This device integrates a great deal of fine electronic components. Disassembly or alternation may result in damages or breaks.

3. Battery Recharging Ways

※ The unit is available for battery recharging on standby mode or power on mode.

※ Please use AC adapter or car adapter to recharge battery. Disconnect those tools, internal battery is also available for power supply once built-in battery is full charged.

※ When internal battery suffers from a power shortage, the battery voltage will get down to specific one, and then the unit will shut down automatically. Please connect adapter for recharging.

4. Notes about battery usage

※ To protect battery, please never charge any full charged battery against any damages caused by overcharge.

※ Battery will get hot after charged, which is a normal phenomenon. But if the temperature is over 60℃ while charging, it means abnormality happened. Please plug off the power cord and take to professional for check.

※ If the battery is charged under high temperature, it will not be charged fully.

※ Suggest to charge under 15℃-25℃ for the best effect.

※ Charge: Charging for 4-6 hours can play more than 60 minutes (depending on different screen brightness).
Tip: The above is the approximate time; actual time depends on working conditions.

※ For long period in storage (over 3-6 month), please charge and discharge at least 3 times for full capacity and normal life reserved.

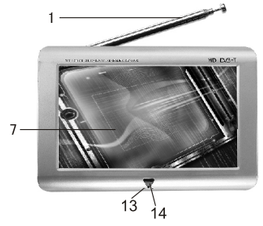
Notes: Internal battery is an optional function, the above description is only for products with internal battery function.

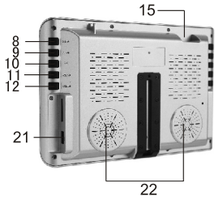
2. Accessories

1. Car power adapter
2. AC power adapter
3. 75-Ω antenna cable
4. Remote control
5. AV cable
6. Telescopic antenna

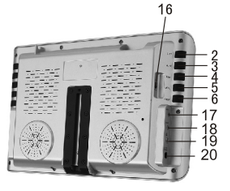
Open the package and make sure all the items are included.

3. Appearance





1. Telescopic antenna
2. PICT: Long press for 3 seconds as Picture mode under TV/AV mode, under picture switch mode as "STANDARD", "SOFT", "VIVID", "LIGHT", "PERSONAL", Press for Picture adjust/panel display mode/reset selection key under DTV mode, able to choose brightness, contrast, chroma, hue (only available with NTSC system), panel disply mode and reset.
   Note: keep pressing for 3 seconds have no functions under OSD menu in DTV mode.
3. MUTE: Press to switch between MUTE and sound under all mode.
4. EXIT: Return key: press to exit current menu and return to previous menu.
5. MENU: menu key.
6. ⏻/MODE(Standby/Operation mode shift button): Press to switch modes between DTV/TV/AV, press and hold over 3 seconds for turning off TV.
7. TFT-LCD screen
8. CH+/▲: Channel selection/upward key.
9. CH-/▼: Channel selection/downward key.
10. OK: Confirm key.
11. VOL+/►: Volume up/rightward key.
12. VOL-/◄: Volume down/leftward key.
13. Power indicator
    ※ Without internal battery:
    Red light: standby / Green light: power on
    ※ With built-in battery:
    Standby: red light / Power on: no operation lights
    Charging in power on mode: Green light flashs / Full charge: green light on
    Charging in standby mode: orange light flashs / Full charge: orange light on
    Note: Charging function is not available in power off mod
14. Remote-control receive window
15. Antenna input Jack
16. Power on/off
17. AV Output
18. AV Input
19. Headphone jack
20. DC Input
21. USB connect Jack
22. Speaker

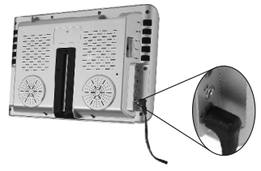


4. Description of Buttons on Remote Control

1. ⏻: Standby/power-on key.
2. MODE: Press to switch between DTV/TV/AV.
3. SEARCH: Automatic search channel when press the key more 3 seconds
4. 🔇: Mute key.
5. 0-9: Digit keys. Press the key to enter channel directly.
6. ⮌: Return key.
7. FAV: ON/OFF my favor channel function. (only available under DTV mode)
8. LIST: Display program list. (only available under DTV mode)
9. INFO: Display current Channel information.
10. EPG: press to display electronic program guide (only available under DTV mode).
11. OK: Confirm key.
12. CH+ ▲ : Channel selection/upward key.
13. CH- ▼ : Channel selection/downward key.
14. VOL+ ▶ : Volume up/rightward key.
15. VOL- ◀ : Volume down/leftward key.
16. AUDIO: Sound track switch key.
17. MENU: Menu key.
18. EXIT: return key; press to exit current menu and return to previous menu.
19. TV/RADIO: TV channel and radio channel switch key.
20. "RED" key: Corresponding menu red function key.
21. "GREEN" key: Corresponding menu green function key.
22. "YELLOW" key: Corresponding menu yellow function key.(Under DTV mode, press this key to switch aspect ratio)
23. "BLUE" key: Corresponding menu blue function key.(Under DTV mode,press the key for timing burn function)
24. P.ADJ: Picture adjustment key (only available under DTV mode).
    Note: Under Menu surface, press this key will not have function..
25. PICT: Picture mode key, press for "STANDARD", "SOFT", "VIVID", "LIGHT", "PERSONAL".
26. SLEEP: sleep turn off time setting key.
27. SUBTITLE: Press to turn ON/OFF subtitles.
28. TEXT: Turn teletext function.
29. ◀◀ : Fast Backward.
30. ▶▶ : Fast Forward.
31. |◀◀ : Last key.
32. ▶▶| : Next key.
33. ■ : Stop key.
34. ▶II : Play/Pause button.

5. Connection of Main Interfaces

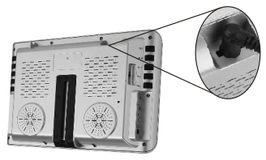
1. Connection of Power Supply:
Align the power supply plug on AC adapter with the jack on the machine rear cover marked with DC.



2. Connection of Antenna Cable:

75ohm antenna conversion line

Align one end of the attached antenna cable plug in the antenna jack on TV set and the other end plug in the external antenna jack.



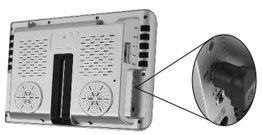
3. Connection of AV cable

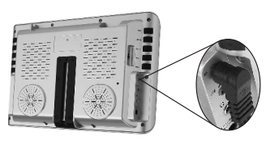
AV conversion cable

(1) AV input: Insert the external video cable into the yellow end of AV cable. Insert the audio left channel cable into the white end and the audio right channel cable into the red end. Then, insert the AV cable into "AV IN" jack.

(2) AV output: Insert the external video cable into the yellow end of AV cable. Insert the audio left channel cable into the white end and the audio right channel cable into the red end. Then, insert the AV cable into "AV OUT" jack.

Note: AV OUT is only available in DTV mode.





6. DVB-T Installation Guide

Follow the installation guide to enjoy your high definition digital TV world. Follow the help information that at the bottom of the window to select preference menu language and suitable country (Region) and start channel search.
If no channel is found during the channel searching process, the user may adjust the antenna position to obtain optimal TV signal.
Press upward/downward key to select item, press leftward/rightward key to switch selected items. In Channel Search item, press OK to auto-search channels, press EXIT to return main menu.

7. DVB-T MENU Operation Guide

7.1 Program
Four sub-menus (Program Edit, EPG, Sort, LCN) are included in Program item, press OK key to enter, press upward/downward key to select item, press leftward/rightward key to switch selected items, press EXIT to return main menu.

7.1.1 Program Edit
Before entering Program Edit item, enter factory password 888888.

Before entering Program Edit interface, press red/green/yellow/blue key on the remote to Move/Skip/Lock/Delete/FAV all TV channels. Press EXIT key to exit.

7.1.2 Sort
Program ordering
You can sort the programs according to your flavor. Optio
By LCN, By ONID , By Service Name , By Service ID etc

7.1.3 LCN
LCN: ON/OFF for logical program list.

7.2 Picture
Set the following items under Picture menu:
1)Aspect ratio: Under this item, it is enable to switch between Auto/16:9 Wide screen/4:3 Full/4:3 Pan&Scan/4:3 Letter Box.
2)TV Format: Under this item, it is enable to switch between PAL/NTSC system.
Once setting finished, press EXIT to return main menu.

7.3 Channel Search
Under Channel Search item, the following operations Are available:
1)Auto Search: Select this item, and press OK to auto search TV channels.
2)Manual Search: Select this item, press OK to manual search TV channels.
3)Country: Setup your country according to your location
4)Antenna Power: Start or exit the active antenna output function.

7.3.1 Manual Search
Under Frequency Channel item, press digital number on the remote to input channel number directly, press OK to manual search TV channels.

7.4 Time

Setup the following items under Time menu:
1)Time Offset: Adjust time zone to Auto or Manual.
2)Country Region: Setup your capital of the Country under this item.
3)Time Zone: Setup your time zone according to your location.

7.5 Option

OSD Language, Subtitle Language, Audio Language, are available to setup in Option menu, press upward/ downward key to select the above items, press leftward/rightward key to switch the selected item. Once

7.6 System

The following operations are available in System interface:
1)Parental Guidance: Setup Lock function according to audiences' ages.
2)Set Password: Change factory password in this item. Input old password and new one orderly, and then confirm. The default password is 888888. Please remember the new password after modifying.
3)Restore Factory Default: Press OK key to restore to factory default setting.
4)Information: Press OK key to check system information.
5)Software Update: Upgrade is needed, select this item for relative operation.

7.7 USB

Under USB interface, the following operations are available:
1)Multimedia: Press OK key to enter USB playing main interface.

2)Photo Configure: Press OK key to setup pictures playing.
3)Movie Configure: Press OK key to setup movie playing.
4)PVR Configure: Press OK key to setup program record.

7.7.1 Multimedia

Insert U disk, select Multimedia item, press leftward /rightward key to select the followings(Music, Photo, Movie, PVR)to play, then press OK key to play from selected file.
Multimedia player feature also has been integrated on the receiver. Press PVR key to display multimedia player window. You could show your preference photo, playing music and movie on multimedia player. Known supported file were illustration below. NTFS, FAT32 file system could be supported at the moment.

Player	Supported file
Photo	JPEG, BMP, PNG
Music	*.wma, *.mp3, *.m4a
Movie	*.avi, *.mpg, *.dat, *.ts etc

7.7.2 Photo configure

The number of parameters when set the picture in slide show mode:
1) Slide Time:the play time of slide show
2) Slide Mode: the style of slide show
3) Aspect Ratio: you can set up Keep or Discard

7.7.3 Movie Configure

1) Aspect Ratio:You can set up Keep or Discard.
2) Subtitle Specific: You can set up NORMAL, BIG or SMALL
3) Subtitle Background : You can set up Transparent, Gray, Yellow green, white
4) Subtitle Font color: You can set up Red, Blue, Green, white , Black

7.7.4 PVR Configure

1) Record Device: Check the stored information
2) Format: Clear information

7.8 PVR FUNCTION

Base on USB PVR function you could record the preference program and playback. Instant recording, EPG recording and timer recording were available.

8.8.1 Instant recording

Press REC. key to start instant recording during watch TV and the recording symbol would be display on the left top of the screen. Press INFO. key to get further more information of instant recording. Press STOP key to stop instant recording.

7.9 INFO. KEY

Press "INFO" key to displaying base information bar during watching TV programs. Press "INFO" key twice to displaying further more program information during watching TV.

Base information bar

Further more information bar.

7.10 SUBTITLE KEY

The programs might have multilingual subtitle information. All available subtitle languages would display on the subtitle information window while you press SUBTITLE key. The screenshot is illustrated below. Follow the help information on the subtitle windows to select preference subtitle.

7.11 UPDATE THE RECEIVER BY USB INTERFACE

1)Plug the USB drive that with the update file to the USB interface of the receiver.
2)Go to main menu and press to start upgrade process. While the upgrade progress showing 100% and update finish, remove the USB flash drive and power on the receiver again.
3)Please set the receiver to the factory settings after reboot the receiver.
NOTE: Please do not remove the USB drive from the receiver and power off the receiver during upgrading process. Otherwise the receiver may not work properly.

8. ATV Menu

Press the MENU button to pop up the following menu:
- Press CH- or CH+ to select one of the three entries above. Press VOL- or VOL+ to open the submenu.

MAIN MENU
PICTURE
SYSTEM
PRESET

8.1 PICTURE

Press CH- or CH+ to select BRIGHT and press VOL- or VOL+ to adjust its analog. Press CH- or CH+ to select CONTRAST or COLOUR in turn and adjust the analog in the same way. Press CH- or CH+ to select RESET. Then, press VOL- or VOL+ to have the analog you have set return to "50".

PICTURE	
BRIGHT	50
CONTRAST	50
COLOUR	50
RESET	

8.2 SYSTEM

SYSTEM	
☐	ENGLISH
CLOCK	OFF
☐	16:9
☐	1
BLUE BACK	ON

- ☐: Allows you to select the OSD language you want.
- CLOCK: Allows you to set the time for auto shutdown(such as it will. Shutdown 30 minutes later).
- ☐: Screen mode, press to shift the screen mode between 16:9 and 4:3.
- ☐: Allows you to revolve the image.
- BLUE BACK: Allows you to activate or deactivate this function when there are no signals.

8.3 PRESET

PRESET	
POSITION	1
REMEMBER	ON
AUTO-SEARCH	
SWAP	1
FINE	0
SEARCH	551MHZ
SOUND-SYS	DK
COLOR-SYS	PAL

- POSITION: Allows you to select a certain channel and activate SWAP, FINE, SEARCH, SOUND-SYS and COLOR-SYS.
- REMEMBER: Press VOL-/VOL+ to select OFF. Thus, this channel does not display when you change channels. If it is set to be ON, this channel would display on changing channels.
- AUTO-SEARCH: Press VOL-/VOL+ to start AUTO-SEARCH function. After AUTO-SEARCH, the system will save the channels automatically. After selections of channels, the system will return to the channel number "0".

Note:
Before you start the AUTO-SEARCH, please set the SOUND/COLOR as the corresponding local systems. Or, the channel program may have no audio or have cacophony while the image may have no colour.
- SWAP: Press CH- or CH+ to select this entry. Press VOL+/VOL- to change it to your required channel. To confirm, press CH- or CH+.
- FINE: Use this entry to adjust the channel for perfect signal quality when the signal quality is poor.
- SEARCH: This entry is used to control the current channel. When you SEARCH a signal in this way the receiving indication frequency will stop. This indicates that a perfect position for you to save a channel. If the channel features a poor signal quality, the system will identify it as no signal.
- SOUND-SYS: Press VOL-/VOL+ to switch among "I", "DK" and "BG" in turn.

Note:
1)SOUND-SYS description: "I" refers to 6.0 M, "DK" 6.5 M and "BG" 5.5 M. Please set the system to the local SOUND-SYS.
2)COLOR-SYS description:
A. For your selection of "I" mode, the COLOR-SYS refers to PAL-I;
B. For "DK", the system refers to PAL-DK or SECAM-DK;
C. For "BG", it refers to PAL-BG or SECAM-BG;
D. For "L", it refers to SECAM-L.
3)For images without audio or with noise, check whether the audio system is set properly.
- COLOR-SYS: Press the VOL-/VOL+ button to switch among PAL, NTSC and SECAM in turn.

Note:
If the signal intensity is very poor or too weak, ill images would still occur with strong noise, swing and bad audio effect no matter how you adjust the antenna. This is not the failure of your TV. Try an open antenna or a cable TV if the telescopic antenna does not work.

8.4 Proper Receiving

8.4.1 Access the setting entries of the "Language" in the System to choose your required OSD language.
8.4.2 Access the setting entries of the "AUTO-SEARCH" and "SEARCH" and make sure whether the systems are set according to the responding transmitting requirements. Refer to Part 8.3 for specific instructions.
8.4.3 Access the setting entries of the "SOUND-SYS" and "COLOR-SYS" and start searching channels according to specific instructions in Part 8.3.
8.4.4 To achieve the best effect for receiving channels, please adjust the direction and angle of your antenna.

9. Trouble shooting

The following phenomenon does not indicate failures. Before you contact us for repair, please check your device according to the approaches below.

Problems	Causes
No picture or sound	The AC adapter does not connect to the vehicle adapter properly; Non-permissible power is applied; The power is off.

Problems	Causes
No signal	Check whether the antenna is located well; Check the parameter of image or region is set correctly; if not, please set or search again.
No sound	Check whether the volume is minimized; Check whether the headset is connected; The signal quality is poor; The sound attenuation function is activated; Check whether the audio system in ATV mode is set correctly.
Mosaic images	Check whether the antenna is adjusted properly; The signal strength is too weak.
Signal search failure	Check whether the country and region is set right; Maybe the signal intensity is too poor.
Too-dark images	Check whether the brightness and contrast of your display is adjusted well; if not, readjust it.
Mosaic images or slack images /sound occur when the car is moving	May the signal intensity in this region is too weak. Please try a vehicle digital TV antenna.

10. Specifications

DTV system:
Input frequency: VHF 177.5 MHz - 226.5 MHz UHF 474 MHz - 858 MHz
Modulate: QPSK/16-QAM/64-QAM
Decode standard:
MPEG1, MPEG2 MP@HL, MPEG4 ASP@L5, HD:DivX(4.x-6.x),
HD: H.264 HD:1080i, JPEG(support 422/411/420/444/440 support)
Audio decode standard: MPEG-1, MPEG-2(layer I/II), AAC, HE-AAC level 2 &level4, Mp3 demode.

ATV system
Analog receive frequency: DK/I 49.75MHz - 847.25MHz
BG 48.25MHz - 847.25MHz
Analog color system: PAL/SECAM
Analog audio system: DK☐ I☐ BG☐ L☐

General characteristic
Display: Colour TFT-LCD
Screen size: 9 inches
Resolution: 800(H)× 3(RGB) × 480(V)
Speaker: two 4.0cm round loudspeaker
Connector: Input jack for external antenna; stereo headset jack; audio/video (AV) input jack; DVB-T(AV) output jack, USB jack
Supported power: Three options:
1. Alternating current power supply - AC adapter
2. Vehicle battery (12V) - vehicle adapter
3. Build-in battery 7.4V/1700mAh(Optional)
Power Consumption:
Without recharging function, the power consumption is 12W around☐
With recharging function, the power consumption is 15W around☐
Dimension: 258 × 156 × 39 (mm)
Weight: about 706g
Working temperature: 0℃-40℃
Storage temperature: -20℃-60℃

Warning
- This manual is for your reference only. The information in the Manual is subject to change without prior notice. The company reserves the right to explain for any unknowns, errors or omissions.
- No elements are recoverable inside your device. Do not attempt to open it to improve your TV set. The high-tension supply inside may cause dangers. The maintenance and adjustment of your TV set must be operated by professionals.

Warning
- To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.
- The mains plug is used as the disconnect device, the disconnect device shall remain readily operable, and it shall be disconnected from the mains completely.
- The plug is used as disconnect device form the mains supply, the plug shall remain readily operable.
- The apparatus should not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.
- Danger of explosion if battery is incorrectly replaced. Replaced only with the same or equivalent type.

【☑after some items in this manual means it is available with this function.】